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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,138	09/08/2003	Kimikazu Matsumoto	8005-1006-1	8662
466	7590	06/14/2005	EXAMINER	
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			NGO, HUYEN LE	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/656,138

Applicant(s)

MATSUMOTO ET AL.

Examiner

Julie-Huyen L. Ngo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 3-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: See Continuation Sheet.

Continuation of Attachment(s) 6). Other: figures 4 and 11 (attachments 1 and 2.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Watanabe et al. (US6259503B1).

Watanabe et al. teach (Fig. 11) forming an active matrix liquid crystal display device comprising:

- a pair of substrates 101/201 with a liquid crystal layer 301 between said substrates;
- a pixel electrode 104 and a common electrode 103 having a common longitudinal axis and that are arranged and adapted to generate an electric field parallel to said substrates in said liquid crystal layer, said liquid crystal layer having a nonzero initial alignment angle of 90 degrees relative to the common longitudinal axis;
- a thin film transistor having a source electrode and a drain electrode adjacent to a first part of said liquid crystal layer under protective layer 106, said source and drain electrodes inherently being arranged and adapted so that an electric field

generated between said source and drain electrodes is one of substantially parallel to and perpendicular to the non-zero initial alignment angle, whereby an alignment of the first part of said liquid crystal layer does not change when an electric field is generated between said source and drain electrodes since the electric field generated between said source and drain electrodes is substantially parallel to the rubbing direction.

wherein

Claim 2:

- said source and drain electrodes are arranged and adapted so that an electric field generated between said source and drain electrodes is substantially parallel to the non-zero initial alignment angle, and wherein said source and drain electrodes have facing edges that are parallel to each other and perpendicular to the non-zero-initial alignment angle as Fig. 11 shown.

Response to Arguments

Applicant's arguments filed on 4 April 2005 have been fully considered but they are not persuasive.

Applicant's ONLY argument:

The Official Action states that the initial alignment angle in WATANABE et al. is 90° (not zero) relative to the common longitudinal axis, but does not explain how Figure is being interpreted. This is not believed to be correct because the common longitudinal axis in Figure 11 is parallel to the rubbing direction shown by the arrow (0°). However,

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WATANABE et al. disclose that the rubbing direction is parallel to (makes a zero angle with) the common longitudinal axis of the pixel and common electrodes (vertical in Figure 11).

Examiner's responses to Applicants' ONLY argument:

WATANABE et al. disclose that the common electrode and pixel electrode have two parts: one part of electrode 103/104 is parallel to gate lines 108 and the other part of said electrode (comb structures) is parallel to data lines 102. Therefore, the initial alignment angle in WATANABE et al. is 90° (not zero) relative to the common longitudinal axis, and the source and drain electrodes have facing edges that are parallel to each other and perpendicular to the non-zero-initial alignment angle (see attachment 1).

Applicant is to note in Figure 4 of the present application, that the common electrode 14 and pixel electrode 24 have two parts: one part of the electrodes is parallel to gate lines 12 and other part of the electrodes (comb structures) is parallel to data lines 21. The common electrode 14 (not comb-structure parts) and pixel electrode (comb-structure parts) 24 do not have a common longitudinal axis (see attachment 2).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

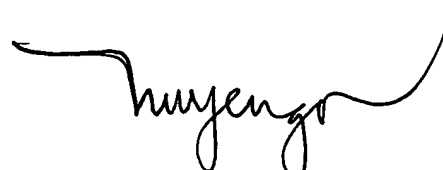
Contact Information

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Julie-Huyen L. Ngo whose telephone number is (571) 272-2295. The Examiner can normally be reached on T-Friday.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. Robert H. Kim can be reached at (571) 272-2293.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1562.

June 10, 2005

A handwritten signature in black ink, appearing to read 'huyen ngo', with a long horizontal flourish extending to the left.

Julie-Huyen L. Ngo
Primary Examiner
Art Unit 2871

Attachment 1

FIG. 11

